## MIT Small Satellite Center Seminar, Fall 2019

## The Globalization of Space: Changing Demographics of the Satellite Orbital Population

**Dr. Jonathan McDowell**, Harvard-Smithsonian Center for Astrophysics

Noon on Monday, October 7th 2019 MIT 31-115, MIT LL Beaverworks Lunch provided, first-come, first-served

MIT Small Satellite Center Lightning Talks and Networking will immediately follow the seminar from 1:00 until 2:00 pm Email smallsat@mit.edu to ask if 3-min talk slots or posters are still available.

Abstract: The space race isn't what it used to be. What started off as a competition between superpower governments has become a free-forall with dozens of countries and many commercial and non-profit entities. I'll review the changes decade by decade as the space arena progressively internationalized, commercialized and then democratized; discuss quantitatively how much stuff is in space now, who's putting it there, and what it's up to. I'll also discuss the



population of satellites in special orbits such as the geostationary and sunsynchronous regimes.

**Speaker Bio**: McDowell has a BA in Mathematics (1981) from Churchill College and a PhD in Astrophysics (1986) from the Institute of Astronomy, both at the University of Cambridge, England. McDowell is a staff member at the Chandra X-ray Center, and author of the widely followed **Jonathan's Space Report**: https://www.planet4589.org/space/jsr/jsr.html